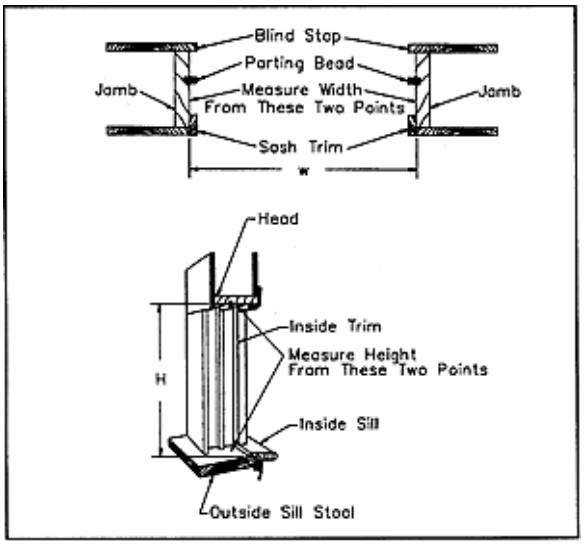
Alside Window Systems

Replacement Windows

Installation and Measuring Guide

These recommended residential installation methods and techniques have proven successful in attaining maximum performance levels for energy-engineered and thermally-designed premium vinyl window products. These methods were collected from, and are currently being used by, top window installation professionals from coast to coast. The recommended installation methods should not be construed as set instructions or the only possible or correct way of installing replacement windows. Actual field conditions and construction characteristics in various geographical areas will dictate variances in installation methods and are the sole responsibility of the independent window installation professional.

REPLACEMENT WINDOWS INSTALLATION GUIDE



PROPER MEASURING TYPICAL WOOD OPENINGS

Replacement windows are ordered and manufactured E. B. (Exact Both) size, exact width and exact height. Windows are manufactured to the nearest 1/8".

EXAMPLE: A window ordered 32 x 45- 1/8 will be manufactured 32" x 45- 1/8".

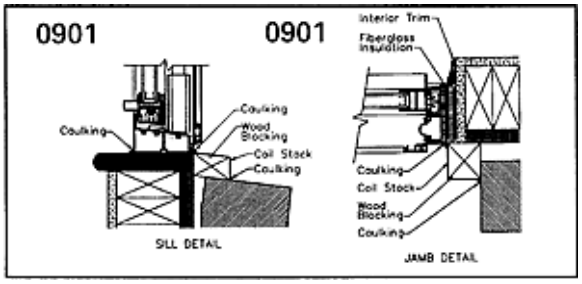
To measure:

1.) Width: Measure between the jambs at 3 points - top, middle and bottom. Use the smallest measurement.

2.) Height: Measure from back side of the sill stool to the top of the window casing on the left, right and middle. Use the smallest measurement. Cut back the dimensions to allow for squaring and leveling the window frame in the opening, and, insert insulation between the opening and the mainframe. Normal cut back is 3/8".

EXAMPLE: Opening size 32" x 45-1/2" Order and manufacture E. B. size 31-5/8" x 45- 1/8".

Note: Alside only accepts exact measurements, and is not responsible for determining window cutback sizes.

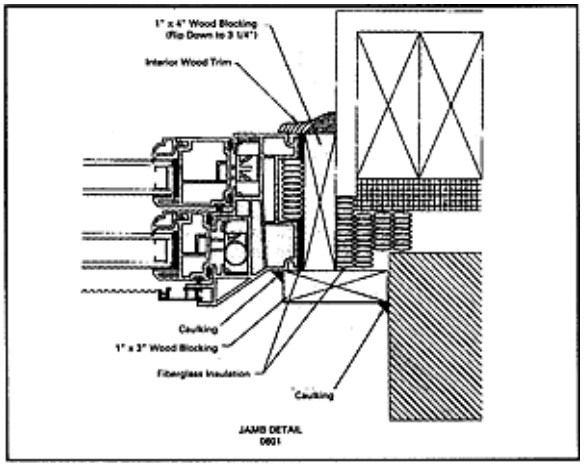


METAL REMOVAL

Measure the 3 width points from the plaster of drywall return. Measure the 3 height points from the marble of Formica sill to the header drywall return.

Size the window to fit inside this opening, allowing for squaring and leveling. Keep in mind what materials will be needed to finish the window units on the interior and exterior, whether it is caulking, vinyl or wood trim on the interior, and caulk, vinyl or wood and coilstock on the exterior.

All needed installation materials should be noted so they are on hand at the time of installation.



BUCK FRAMING

When a metal window is removed, the replacement window can be sized for a wood buck frame to line the four sides of the existing opening. A 1 x 4 can be ripped down to the depth of the replacement window (approximately 3-1/4").

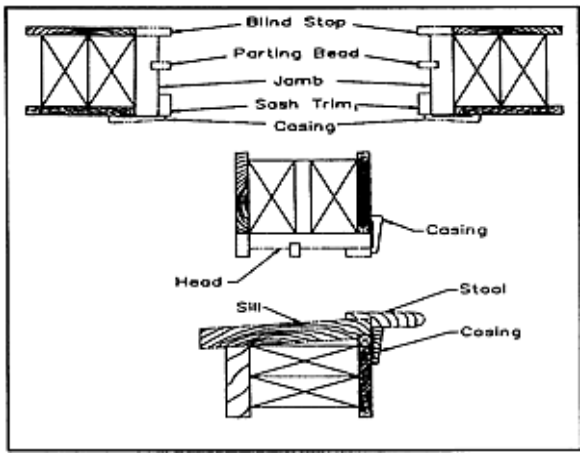
To size the window for such an application, use this formula:

1.) Drywall return size less 1-1/2" for the wood buck = the buck frame opening size.

2.) Deduct 3/8" on the width and 1/4" on height for the E. B. window size.

EXAMPLE:

Drywall return size	36-1/8	x	48
Wood buck	-1-1/2	x	-1-1/2
Wood buck opening size	34-5/8	x	46-1/2
Less 3/8 width, 1/4 height	- 3/8	x	- 1/4
Order manufactured E. B. size	34-1/4	x	46-1/4



BAY OR BOW WINDOWS

Bay and bow windows come with their own jamb sections, header and seat. This is called wood buck. When measuring, it is necessary to figure ahead to the installation and plan on removing the existing wood frame all the way down to the studs. This will provide a secure surface to anchor the bay or bow unit.

Note the phantom lines in the diagram. They indicate the window components that can be removed to reach the studs. This will provide a secure surface to anchor the bay or bow unit.

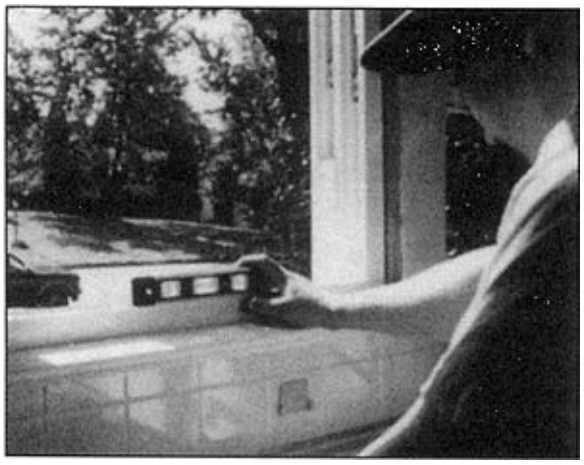
When measuring, it is imperative that the unit be measured to fit snugly inside the rough opening. The angle or degree of the bay (15º, 25º, 30º, 45º), and the proper wall thickness (from the interior of the drywall or plaster to the outside of the siding) needs to be determined.

Determine what type of windows will go into the bay or bow.

EXAMPLE: 1 bay unit 72" wide x 48" high
6 -1/2" wall thickness
with 0961, 0964, 0961 windows

Note: Make sure the existing header is sufficient and conforms to local building codes.

REPLACEMENT WINDOWS INSTALLATION GUIDE

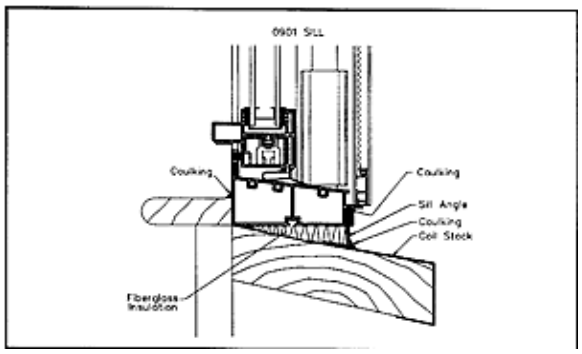


DOUBLE-HUNG/STANDARD WOOD-SQUARE, LEVEL, PLUMB

Insulate the window sill opening prior to setting the masterframe in place. With a level on the masterframe sill, adjust the masterframe unit so the sill is level. Install a screw in the lower corners of the masterframe jambs. There are pre-drilled holes located behind the sash stops. Now level the masterframe jambs and insert the installation screws in the upper corners of the jambs. Snug the installation screw. Do *not* over tighten.

Insulate the jambs and header of the window. Make sure that the masterframe jamb sections and sashes make full contact with each other. Shim the masterframe as needed to ensure that all sash finseal weather-strippings make full contact with the masterframe.

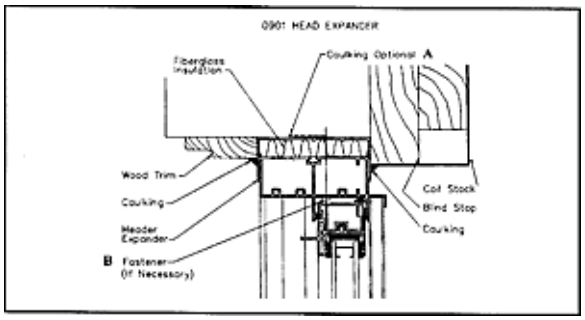
Operate and tilt both sashes prior to replacing the trim to be sure that both function properly and that all adjustments are complete. Reinstall the existing or new interior trim, and caulk the interior, and exterior perimeters of the window unit.



COIL STOCK & SILL ANGLE

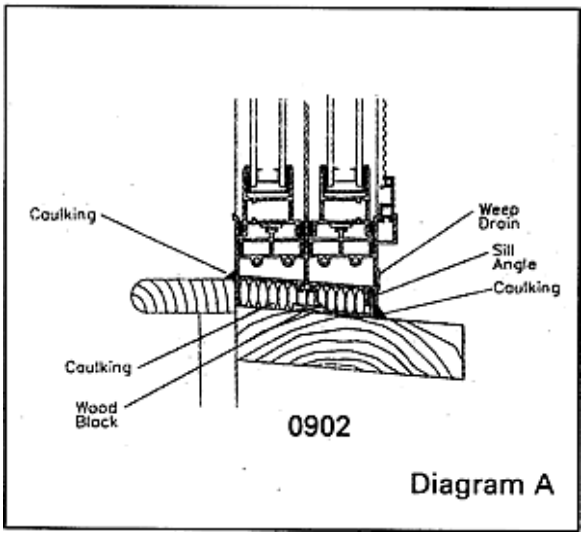
If the sill is to be covered with coil stock, apply coil stock prior to setting window unit into opening. Extend coil stock approximately 1" under window unit and nail so that nails will be covered with the window once it is in place. Always pitch coil stock so water will run off, and not sit against the window unit.

For installation into an opening with a sloping sill, a sill angle is pro-groove behind the screen track (D/H units), which is behind the exterior leg of the unit's masterframe. Always have window overlap sill angle and coil stock to reduce risk of water infiltration.



HEADER EXPANDER

A header expander is provided to ensure a tight fit in the height, yet allow downsizing of the window unit for leveling purposes during installation. If possible, place fiberglass insulation between header expander and masterframe. This will prevent cold transfer and assist in keeping the expander extended. Do not use too much insulation, as this will cause a bow in the header and prevent proper locking. Caulking may be applied (A) to the opening header to create a seal between the opening and the header. On a wide unit, a cabinet and shutter screw may be installed through the header to prevent sag (B).



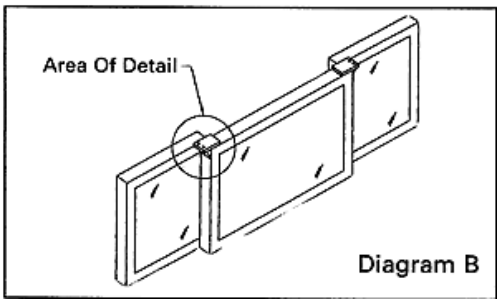
ROLLERS 2 & 3 LITE, SUPPORT

As with double-hungs, roller windows achieve maximum performance from installation methods that dictate square frames, precise leveling, and straight, tight lines between sash and masterframe.

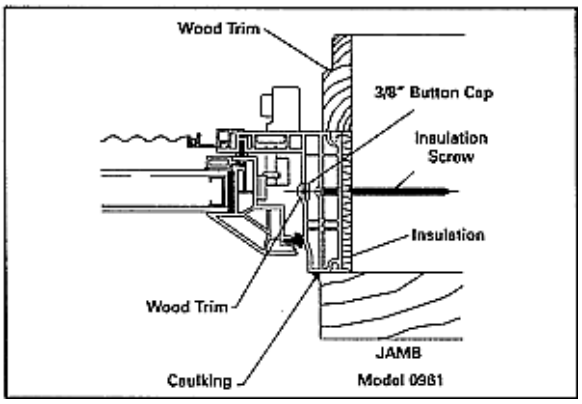
Proper support and leveling of the masterframe sill is **critical**. The sill should be level from side to side and interior to exterior. When installing over an existing slope sill, a continuous wood sub-sill is recommended to support weight of sashes (Diagram A). Jambs should be leveled and shimmed to attain straight lines.

The roller unit has a weep-drain system on the exterior of the sill the **must not** be covered by angle or coil stock. Secure header with a screw if it should sag. A sagging header will result in sashes not being able to be removed for cleaning. Check daylight measurements to be sure that the center measurement is the same as that near the side jambs. This will indicate parallel header and sill.

On a 3-lite roller window, a stationary sash block can be screwed intothe header to secure the center sash in place (Diagram B).



REPLACEMENT WINDOWS INSTALLATION GUIDE



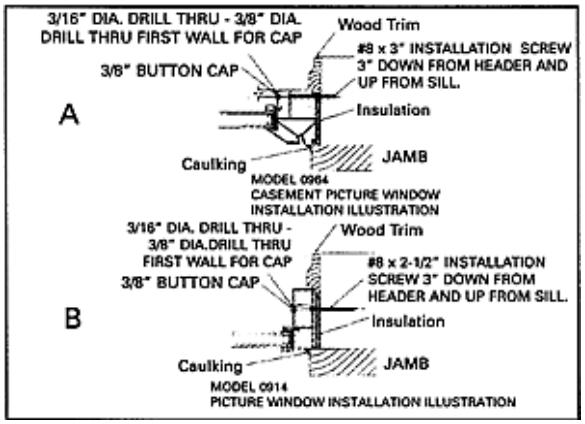
CASEMENT AND AWNING WINDOWS

With the casement and awning windows, the same installation tech- niques apply to ensure that the window unit is installed plumb, level and square.

The pre-drilled holes in the masterframe are for installation screws.

The screws are placed where they will not interfere with the sash opera-tion. These screws will go through the masterframe and into the existing opening. Use the colored plugs to cover the screw head and to plug the holes.

It is imperative that exterior stops and interior trim be installed with casement and awning windows. There is a great deal of weight hanging out when a casement or awning is open. Proper support is essential.



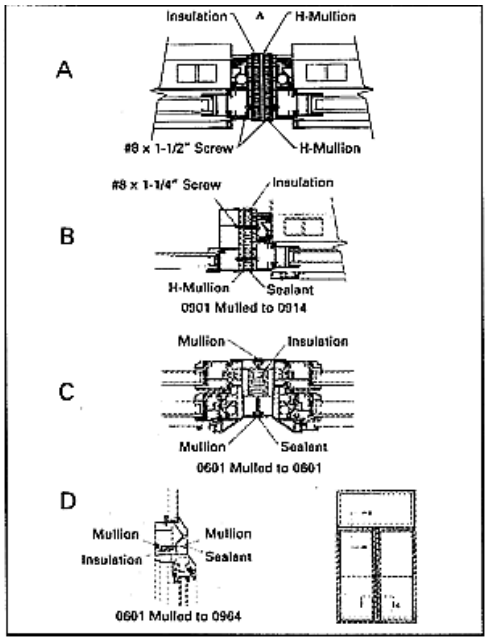
PICTURE WINDOWS

Diagram A illustrates a model 0964 Picture Window. Install the instal-lation screws through the frame as shown. Drill a 3/16" hole through the

3 layers of vinyl, then drill a 3/8" hole through the first layer of vinyl. Insert the installation screw through the first layer of vinyl so the head of the screw stops at the second layer. Cover the 3/8" hole with the color coordinated button cap so the screws are not visible.

Diagram B illustrates a model 0914 Picture Window. Install the instal-lation screws through the frame as shown. Drill a 3/16" hole though 2 layers of vinyl then drill a 3/8" hole through the first layer of vinyl. As

with the 0964 insert the installation screw through the first layer so the head of the screw stops at the second layer. Cover the 3/8" hole with the button cap.



MULLED UNITS

MODELS 0901 TO 0904

Mulled units are ideal for large openings with multiples of windows.

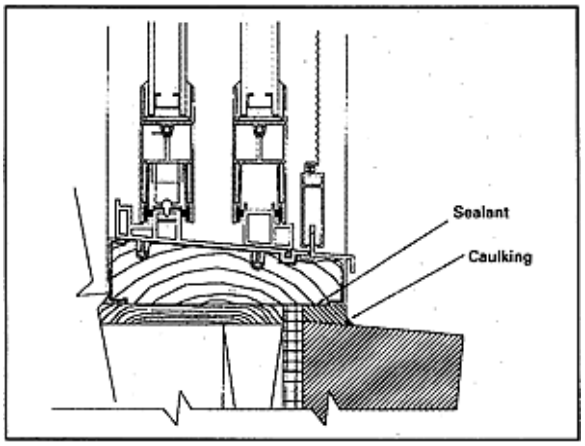
The H mullion is used with the 0900 series and can be used for mulling 0901's to each other (as in Diagram A), 0901's to 0914's (as in Diagram

B).

When using mullions, it is recommended that the window openings have a continuous exterior header stop to secure the windows in the opening. Also, use a continuous sill angle nailed to the opening prior to inserting the windows. This will prevent the sill of the multiple units from bowing outward.

Concealed installation screws can be placed through the headers at the mullion junctions to keep the windows level, square and secure.

<u>DO NOT SCREW THROUGH THE SILLS, AS WATER MAY INFILTRATE.</u>



MODELS 0601 TO 0601

Mulling the Ultramaxx window can be done easily with the mullion UV10 as shown in Diagram C. The two units butt up to each other, and the mullion is snapped into place. Place a small amount of sealant where the two units meet, and snap the mullion in place. This will keep water and air from infiltrating from the exterior.

MODELS 0601 TO 0964

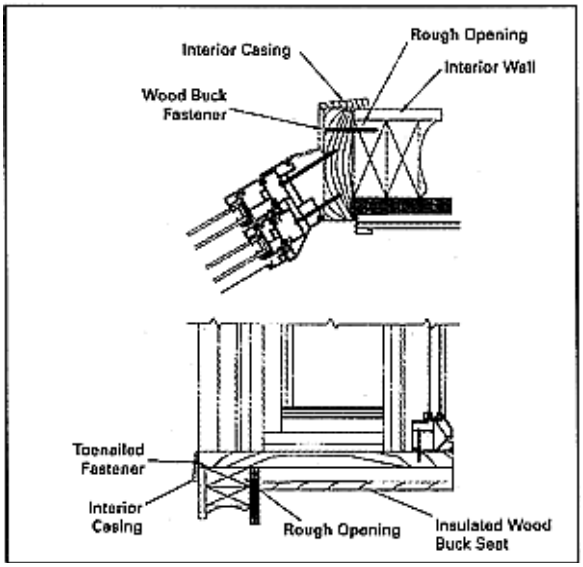
Diagram D illustrates how an 0964 can be stacked on top of two 0601's to fill a large opening. This is called transom picture window.

PATIO DOOR

The premium vinyl patio door is shipped K. D., or knock down. That means the main frame consists of 4 components: the header, sill and jamb sections. Every door comes with detailed assembly and installation instructions. Follow these instructions carefully.

Prior to assembly of the frame, it is imperative that the components are sealed according to the instructions to insure the unit does not allow water infiltration.

REPLACEMENT WINDOWS INSTALLATION GUIDE



BAY OR BOW UNITS

Bay and bow units should be installed in the rough opening, down to the studs. Make sure the existing header is sufficient and conforms to local building codes.

Level and square the unit in the rough opening and screw the wood buck through the jamb sections and into the wall studs (Diagram A). On the head and sill, screws can be toenailed through the buck frame edge and into the header and sill of the opening (Diagram B). This will prevent the interior header from sagging. These screw heads will be concealed when the interior casing is installed.

For additional support, knee braces should be installed and anchored from the bottom of the seat to the wall of the house. A chain and turn-buckle system can also be used from the header of the buck frame to the wall of the house or the roof rafters in the soffit overhang.

When installing any bay or bow, construct a roof covering and insulate and seal the bottom of the seat.

All exterior bare components must be insulated, covered and sealed from the elements.

INSTALLATION PROFESSIONALS

Window installers should be professional. Show your customer that you are a professional by extending courtesy and respect.

A confident, courteous and friendly installer will assure the homeowner that they made the right choice in hiring you to replace their windows.

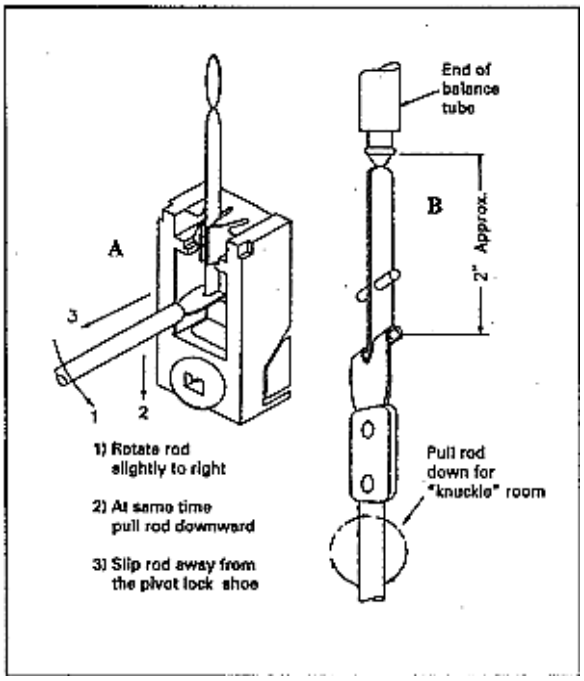
It has been proven that windows installed plumb, level and square out-perform those that were not. Good installations mean that all sash and mainframe components meet to create the seals the windows were designed with.

Your work will be viewed for many years to come. Do a good job.

INSPECTING NEW WINDOW PRIOR TO DEMOLITION

Unwrap and thoroughly inspect the new window prior to removing the old window. Check the measurements of the new unit to the opening it will fill. Check for any shipping or material damage. If any component of the mainframe is damaged, repair or replace it prior to demolition of the old window. Moving parts, locks, balances, glass, rails, etc. can be repaired easily after the window is installed.

After visually inspecting the window, shut and lock it until the old window is removed. This will allow the seals, locks, interlocks and weatherstripping to engage and seal. This will also make locking the units easier after installation.



SPIRAL BALANCE ADJUSTMENT

IMPORTANT: Before tilting lower sash, make sure it is raised at least 3" off sill.

Sash dropping, hopping up from sill, or spiral rod disengagement can be corrected by a simple adjustment. Tilt sash downward to expose balance tilt shoe (see Diagram A). Be careful not to allow rod to “spin off” or disconnect from tensioning tool.

If sash is dropping, add tension by rotating balance rod counterclock-wise. Apply tension equally to both sides. Do not exceed two full turns at a time. Reconnect rod to tilt shoe. Reposition sash and check operation.
If additional tension is required, repeat process until sash holds in any position.

If sash is hopping, less tension is required. Release the tension equally on both sides by allowing the tensioning tool to rotate clockwise for one or two full turns. Reconnect rod to tilt shoe. Reposition sash and check operation. Repeat process if necessary.

If rod is disconnected from tilt shoe, follow Diagram B for position of balance rod before connecting tensioning tool and tensioning balance. Apply tension to both sides equally, not exceeding four full turns at a time.

The balances are adjusted at the manufacturing plant according to the size of the windows and the weight of the sash. Final adjustments need to be made at the time of installation.

REPLACEMENT WINDOWS INSTALLATION GUIDE

INSULATION

Insulation of window frames is important to reduce hot and cold external temperatures from transferring to the interior. Insulate the window sill prior to setting the unit in place. On a slightly sloped or flat sill, use a thin layer, of insulation to prevent the mainframe sill from bowing upward.

With a wide putty knife, stuff fiberglass insulation into the cavity between the mainframe and the opening. Use enough insulation to provide uniform compression of the finseal on the sashes and main-frame. Too little insulation will cause gaps between the mainframe and sashes, allowing air infiltration.

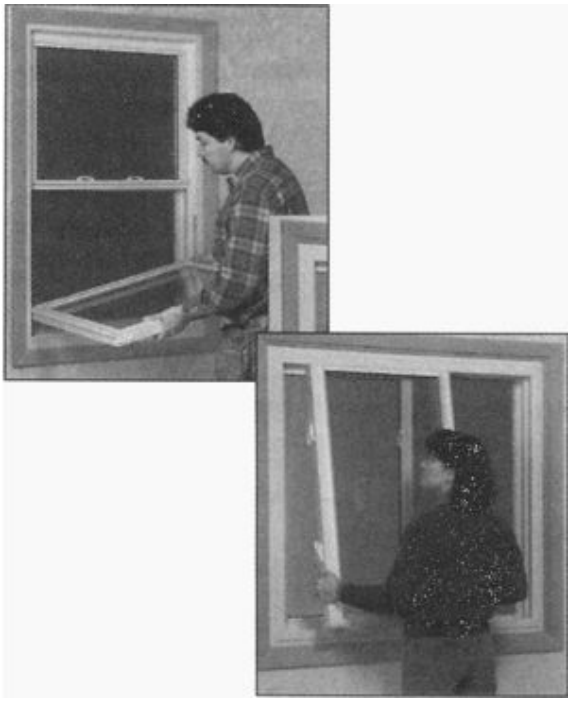
Too much insulation will cause difficult sash movement and binding when tilting.

CAULKING

Upon completion of the installation, make sure that the sashes operate properly before caulking. Lock the window and caulk the interior and exterior window perimeters from the window to the opening structure. Use a good quality sealant. Check manufacturer's label for specific recommendations.

Any silicone caulk must be a neutral base silicone. Silicone that releases an acetic acid during cure does not adhere well to vinyl.

The vinyl window gains strength from the surrounding wall structure. This is obtained from proper sizing, support and installation techniques. The windows must remain shut and locked while caulking occurs. This will ensure that the windows operate as they did during final adjustments.



REMOVE DOUBLE HUNG AND ROLLER SASHES

DOUBLE HUNG

The double hung sashes can be removed for service work. **Be careful when you remove the sash, as it can be very heavy**.

After tilting in the sash, raise one side until the pivot bar is free from the balance shoe. Then the opposite end of the sash can also be removed.

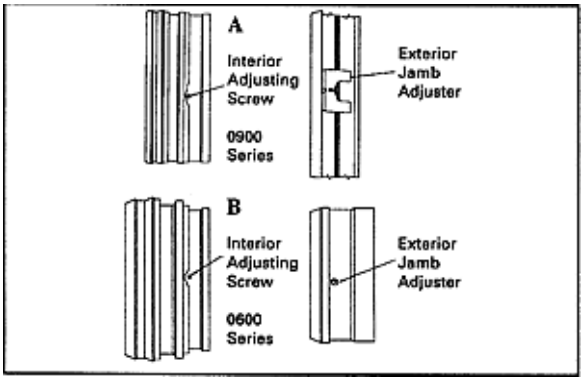
To reinstall the sash, simply reverse this procedure.

Caution: The balances are factory pre-tensioned to hold up the weight of the sash. The balance shoe (the part that receives the pivot bar) is equipped with a braking mechanism that engages when rotated 1/4 turn or more upward by the tilting action of the sash. If the balance shoe should snap or slip up, place the end of a large flat tip screwdriver in the balance shoe hole, pull shoe down into position and twist screw-driver 1/4 turn or slightly more to engage the brake.

ROLLER SASHES

Roller sashes lift out for cleaning. Open the window to within 3 inches of being fully open. This will bypass the burglar blocks. Hold
the sash on both sides and lift up far as possible in the upper track. Then, pull the bottom of the sash toward you until it is clear of the window frame, lowering it out of the top track.

To reinstall the sash, simply reverse this procedure.



JAMB ADJUSTERS

Jamb adjuster are located approximately midpoint of a double hung
or roller window mainframe. The 0900 series uses a Phillips head adjuster screw; the 0600 series uses a straight (flat) screw. These screws are used to ensure the finseals on the sash are compressed against the mainframes

When using these jamb adjusters, tighten both sides evenly; do not adjust only one side. If only one side is adjusted, it will create poor sash and frame alignment.

Diagram A illustrates the 0900 series jamb adjusters.

Diagram B illustrates the 0600 series jamb adjusters.

REPLACEMENT WINDOWS INSTALLATION GUIDE

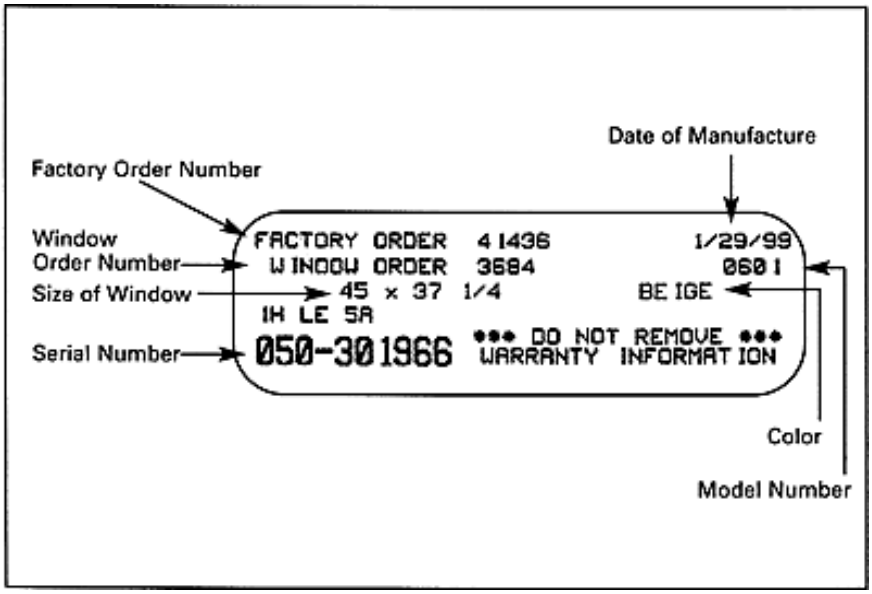
CLEANING AND LUBRICATING WINDOWS

Standard glass cleaners are fine for cleaning glass surfaces.

Use a non-abrasive spray cleaner for cleaning vinyl frames. Do not use any petroleum based materials or solvents on glass or vinyl surfaces.

Periodic cleaning of the mainframes and sashes prolongs the life of all moving parts. Clean all tracks with cleaners and soft rags, dry the tracks with a clean rag, and spray the tracks with silicone spray. Do not use oil or other types of petroleum-based lubricants. These will stay oily and attract dirt and debris, which will bind the moving parts.

Proper cleaning and lubricating will keep the window units operating for many years to come.



WARRANTY INFORMATION

The warranty sticker on each window includes important information about the new premium vinyl window. It should be left on the window frame for future reference and includes the following information:

This information can be supplied to the manufacturer, referenced by computer, and all window part and component information will be available for years to come should there ever be a need for service.

At that time, write to the address listed on your warranty and state the nature of the com-plaint within 30 days of discovery. We will refer your claim to the proper representative and notify you by mail of your contact person. Please allow a reasonable amount of time for any inspection. We will process your claim based on the specific term of the product war-ranty.